IDG130030

IDAHO DEPARTMENT OF FISH AND GAME
600 S Walnut / P.O. Box 25
Boise, Idaho 83707

C.L. "Butch" Otter / Governor
Virgil Moore / Director

RECEIVED
DEC 3 2018
EPA - REGION 10
Office of Compliance and Enforcement

November 28, 2018

Mr. Raymond Andrews
Compliance Officer
Water and Wetlands Enforcement Unit
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 155
OCE-101
Seattle, WA 98101-3140

Dear Mr. Andrews:

On behalf of the Idaho Department of Fish and Game (IDFG), I would like to express my appreciation for the June 4, 2018 Idaho Department of Environmental Quality (IDEQ) Clean Water Act (CWA) inspection of the Mackay Fish Hatchery ("Facility") and the subsequent United States Environmental Protection Agency (EPA) administrative file review to ensure that the facility is in compliance with the CWA and the National Pollutant Discharge Elimination System (NPDES) general permit number IDG130030 ("Permit") for *Aquaculture Facilities in Idaho, subject to Wasteload Allocations under Selected Total Maximum Daily Loads*. The purpose of this letter is to respond to and address violations identified in the EPA Warning letter dated November 19, 2018 (Attachment 1). While at the time of the inspection no areas of concern were found, the purpose of this letter is to respond to and address the violations identified in the Review of Administrative Files section of the EPA Notice of Violation letter dated November 19, 2018 (Attachment 1).

Violations identified in the Review of Administrative Files section of the November 19, 2018 letter:

1. EPA reviewed the DMRs from October 2013 through September 2018, and identified effluent limitation exceedances that constitute 25 violations of the CWA, 33 U.S.C. § 1251 *et seq.* A list of these violations is attached (Enclosure 1).

2. Part V.B.1 of the Permit states, in part, "Paper copy submissions. The permittee must submit reports monthly, postmarked by the 20th day of the following month."

   Part V.B.2 of the Permit states, in part, "Electronic submissions. If, during the period when this permit is effective, EPA makes electronic reporting available, the permittee may, as an alternative to the requirements in §V.B. 1, above, submit reports monthly, electronically by the 20th day of the following month, following guidance provided by EPA."

   Upon review of administrative files from October 2013 through 2018, EPA found that the Facility submitted 10 DMRs late. A list of these violations in enclosed (Enclosure 2). Failure to submit DMRs by the required date is a violation of Part V.B of the Permit.

The identified deficits should be considered resolved in light of the following:

1. The *Idaho Department of Fish and Game and Lost River Hatchery Waste Load Allocation Modification* (HUC 17040218; Attachment 2), issued in March 2015, states: "*The IDFG facility does not appreciably impact Warm Springs Creek temperatures and the facility should not have a WLA assigned for temperature which is unattainable. Four factors suggest the hatchery is currently implementing the most practicable best management practices (BMPs).*"

Additionally it states: *"Based on the collected data, the hatcheries do not raise the temperature of the spring sources before they are discharged from the present day outfall structure. The current WLA for both hatcheries is to meet the numeric state WQS including salmonid spawning temperatures during spring and fall months. This is not possible since the source water (11°C at IDFG) already exceeds the 9°C daily average for salmonid spawning. However, in order to protect salmonid spawning to the extent practicable, DEQ will modify the current temperature WLA for the hatcheries to 13°C daily maximum temperature as outlined in IDAPA 58.01.0250.02f.ii. The WLA also reflects the actual natural background conditions for temperature and is consistent with Idaho's WQS. Upon approval of this modification the temperature WLAs in the 2004 TMDL will no longer apply and the new WLAs will become part of the next General Aquaculture Permit."*

For additional information regarding the 2015 Waste Load Allocation Modification, you may consult:
Troy Saffle, IDEQ, # (208) 528-2650, Troy.Saffle@deq.idaho.gov
Lisa Kusnierz, EPA Region 10, # (208) 378-5626, kusnierz.lisa@epa.gov

2. The DMRs for the following dates were submitted in paper copy form to EPA by their respective due dates: Dec 2015, Jan 2016, Feb 2016, March 2016, April 2016, May 2016, June 2016, July 2016, Aug 2016, Sept 2016. These are signed, dated, and on file at the Facility. During this period, electronic submissions were not required. NetDMR reporting for Mackay Hatchery commenced with the October 2016 DMR submission. During the January 2017 NetDMR submission session on February 16, 2017, the Mackay Hatchery Signatory/Permit Administrator, Mr. Robert Hoover, noted that NetDMR forms for were available for Dec 2015, Jan 2016, Feb 2016, March 2016, April 2016, May 2016, June 2016, July 2016, Aug 2016, Sept 2016. Even though Mr. Hoover had already submitted the DMRs for these months via paper copy, he completed NetDMR forms in addition so they would be available electronically for future reference. This action apparently triggered a system recognition of February 16, 2017 as the Date Received for these DMRs. In actuality, there were no Late DMR Violations, just electronic duplication (NetDMR) of earlier on-time submissions (paper copy DMR).

IDFG is committed to conserving Idaho's natural resources and environment, and takes adherence to the NPDES seriously. I believe that the information detailed above makes clear that the findings of the Review of Administrative Files do not represent violations of the Permit. If there are questions regarding the content of this letter, please do not hesitate to contact me.

Sincerely,

Gary Byrne
Fish Production Manager

Cc: Mr. Jeff Kenknight
Environmental Protection Agency

Mr. Tyler Fortunati
Idaho Department of Environmental Quality

Mr. Erick Neher
Idaho Department of Environmental Quality

Ms. Maria Lopez
Environmental Protection Agency

Mr. Bryan Grant
Idaho Department of Fish and Game
bryan.grant @idfg.idaho.gov

Mr. Pat Moore
Idaho Department of Fish and Game
pat.moore@idfg.idaho.gov

Mr. Robert Hoover
Idaho Department of Fish and Game
mick.hoover@idfg.idaho.gov

ATTACHMENT 1

EPA WARNING LETTER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, Washington 98101-3140

OFFICE OF
COMPLIANCE AND ENFORCEMENT

NOV 19 2018

Reply to: OCE-201

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

WARNING

Mr. Robert Hoover
Manager
Mackay Fish Hatchery
4848 North 5600 West
Mackay, Idaho 83251

Re: Idaho Fish and Game – Mackay Fish Hatchery
NPDES Permit Number IDG130030

Dear Mr. Hoover:

On behalf of the U.S. Environmental Protection Agency (EPA), I would like to express my appreciation for your staff's time and cooperation during the June 4, 2018, Clean Water Act (CWA) inspection of the Mackay Fish Hatchery ("Facility") by the Idaho Department of Environmental Quality (IDEQ) on behalf of EPA. The purpose of the inspection was to determine the Facility's compliance with the requirements of the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) general permit IDG130000 ("Permit") for *Aquaculture Facilities in Idaho, subject to Wasteload Allocations under Selected Total Maximum Daily Loads*. The purpose of this letter is to notify you of the results of the IDEQ inspection. At the time of the inspection, the inspector did not find any areas of concern at the Facility.

REVIEW OF ADMINISTRATIVE FILES

1. EPA reviewed the DMRs from October 2013 through September 2018, and identified effluent limitation exceedances that constitute 25 violations of the CWA, 33 U.S.C. § 1251 *et seq*. A list of these violations is enclosed (Enclosure 1).

2. Part V.B.1 of the Permit states, in part, "Paper copy submissions. The permittee must submit reports monthly, postmarked by the 20th day of the following month."

   Part V.B.2 of the Permit states, in part, "Electronic submissions. If, during the period when this permit is effective, EPA makes electronic reporting available, the permittee may, as an alternative to the requirements in §V.B.1, above, submit reports monthly, electronically by the 20th day of the following month, following guidance provided by EPA."

Upon review of administrative files from October 2013 through 2018, EPA found that the Facility submitted 10 DMRs late. A list of these violations is enclosed (Enclosure 2). Failure to submit DMRs by the required date is a violation of Part V.B of the Permit.

The Mackay Fish Hatchery is required to respond, in writing, to the findings stated above within thirty (30) days of receipt of this letter. The response should include the causes of the violations, and the measures taken to address the current violations and prevent future violations. The request for information in this letter is made under the authority of Section 308 of the Clean Water Act (CWA), 33 U.S.C. § 1318. In accordance with the provisions of 40 C.F.R. § 2.203(b), you may assert a business confidentiality claim covering part or all the information submitted by clearly identifying it as "confidential." If no such claim accompanies the information when it is received by the EPA, it may be made available to the public without further notice. Your response should be sent to:

Mr. Raymond Andrews
Compliance Officer
Water and Wetlands Enforcement Unit
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 155
OCE – 201
Seattle, Washington 98101

Although our goal is to ensure NPDES facilities comply fully with their permits, the ultimate responsibility rests with the permittee. As such, I want to strongly encourage you to continue your efforts to maintain full knowledge of the Permit requirements, and other appropriate statutes, and to take appropriate measures to ensure compliance. Notwithstanding your response to this letter, EPA retains all rights to pursue enforcement actions to address these and any other violations.

If you have any questions concerning this matter, please do not hesitate to contact Raymond Andrews of my staff at (206) 553-4252.

Sincerely,

Jeff Kenknight, Manager
Water and Wetlands Enforcement Unit

Enclosures
1. Effluent Exceedance Violations
2. Late DMR Violations

cc: Mr. Tyler Fortunati
Idaho Department of Environmental Quality

Mr. Erick Neher
Idaho Department of Environmental Quality

Ms. Maria Lopez
Environmental Protection Agency

Enclosure 1

Effluent Exceedance Violations

Month	Parameter	DMR Value	Permit Limit	Unit	Limit Type	# Violations
October 2013	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
March 2014	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
April 2014	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
May 2014	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
June 2014	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
October 2014	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
March 2015	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
April 2015	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
May 2015	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
June 2015	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
October 2015	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
March 2016	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
April 2016	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
May 2016	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
June 2016	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
October 2016	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
March 2017	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
April 2017	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
May 2017	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
June 2017	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
October 2017	Temp, water, °C	11.0	9.0	°C	Daily Avg	1
March 2018	Temp, water, °C	11.1	9.0	°C	Daily Avg	1
April 2018	Temp, water, °C	11.2	9.0	°C	Daily Avg	1
May 2018	Temp, water, °C	11.2	9.0	°C	Daily Avg	1
June 2018	Temp, water, °C	11.1	9.0	°C	Daily Avg	1

Enclosure 2

Late DMR Violations

Monitoring Period	Date Due	Date Received
December 2015	January 20, 2016	February 16, 2017
January 2016	February 20, 2016	February 16, 2017
February 2016	March 20, 2016	February 16, 2017
March 2016	April 20, 2016	February 16, 2017
April 2016	May 20, 2016	February 16, 2017
May 2016	June 20, 2016	February 16, 2017
June 2016	July 20, 2016	February 16, 2017
July 2016	August 20, 2016	February 16, 2017
August 2016	September 20, 2016	February 16, 2017
September 2016	October 20, 2016	February 16, 2017

ATTACHMENT 2

IDAHO DEPARTMENT OF FISH AND GAME AND LOST RIVER HATCHERY WASTE LOAD ALLOCATION MODIFICATION (HUC 17040218)

Idaho Department of Fish and Game and Lost River Hatchery Waste Load Allocation Modification (HUC 17040218)

Introduction

The 2004 Big Lost River Subbasin Assessment and Total Maximum Daily Loads (TMDLs) contained Waste Load Allocations (WLAs) for both the Idaho Department of Fish and Game (IDFG) and the Lost River Hatcheries. These WLAs were based solely on Idaho's Water Quality Standards for Salmonid Spawning and contained a 9°C daily average during the salmonid spawning season, March 1 through June 30 and September 15 through November 15. After Environmental Protection Agency (EPA) approval, DEQ discovered the spring sources for both hatcheries produced water at or above the 9°C WLA, resulting in near continuous excursions of the WLA. Because this WLA was included into EPA's General Aquaculture NPDES permit, the IDFG facility has not complied with the WLA, must report continual exceedences of temperature on monthly Discharge Monitoring Reports (DMRs), and has no mechanism to reduce spring temperatures to achieve compliance with the WLA. DEQ, in cooperation with IDFG and Clear Springs Food, Inc. collected temperature information to modify the WLA to accurately reflect the natural spring temperatures.

IDFG Facility (Permit # IDG-130000)

IDFG maintains and operates a fish hatchery at the headwaters of Warm Springs Creek, in the Big Lost River Watershed. The springs collectively produce 16 to 23 cubic feet per second (cfs), depending on seasonality. The Hatchery collects subsurface spring flows from sources within 150 feet of each other. These springs are collected into pipes underground and no longer see the light of day before they enter the hatchery. Water temperatures of these springs are constant, and range from 10°C to 12.2°C (50°F to 54°F). The two most significant spring sources, the "Six Pack" and "Hole" sources have constant temperatures of 13.0°C and 10.6°C respectively. The springs flow together and mix, with a resulting temperature of 11.1°C. This temperature has remained constant since the 1983 Borah Peak earthquake. This 11°C water is piped underground to four potential locations: the "hatchery house", the "large raceways", "small raceways", and "the hole raceways" (Figure 5). IDFG collected continuous data at these locations as well, attempting to determine which individual sources may add the most heat (Appendix A). Unused water can flow directly to the outfall structure for discharge.

Temperature Records

The spring source was fully covered with large boulders and cobble in 1984 to protect the water from sources of hatchery contamination. From 1984-1994, measured temperature at the inflow of water to the hatchery and the combined outfall were collected with thermometer immersed in water until stabilized then removed after recording. Data in Table 1 are averages of these "dip" recordings as reported by IDFG. During the period 1984-1996, the monthly average hatchery effluent temperature was 11.9°C with a range from 11.1 to 12.6°C (Figure 1). IDFG staff

monitored temperatures at the spring sources and various locations continuously around the facility in 2008 through February 2015 (Table 1) by placement of Onset Hobo model continuous thermistors. In addition, spring temperatures are monitored monthly for DMR purposes. Figure 2 displays the measured temperatures for the combined spring sources and the outfall. During the monitoring period (2008-2015), the average effluent temperature is 10.9°C, slightly less than the combined springs input. Graphs of both entire data sets are graphically displayed in Appendix. Each record contained at least 70,000 data points representing temperatures taken on 15 minute intervals.

Table 1 Measured Temperature at the IDFG Mackay Fish Hatchery (2008-Feb. 2015)

Location	Average Temperature (°C)
Combined Spring Sources	11.1
Outfall (2008-Feb 2015 continuous loggers)	10.9

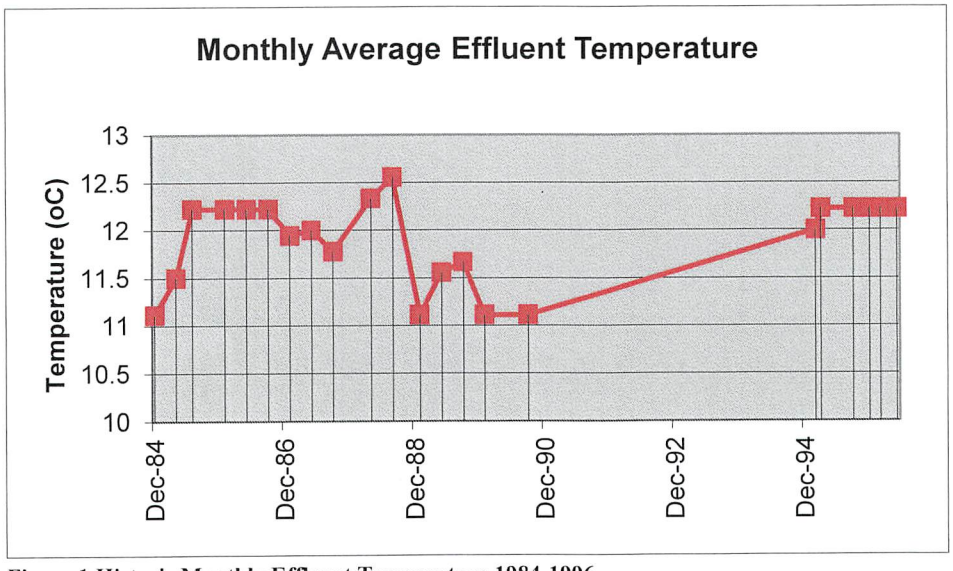


Figure 1 Historic Monthly Effluent Temperature 1984-1996

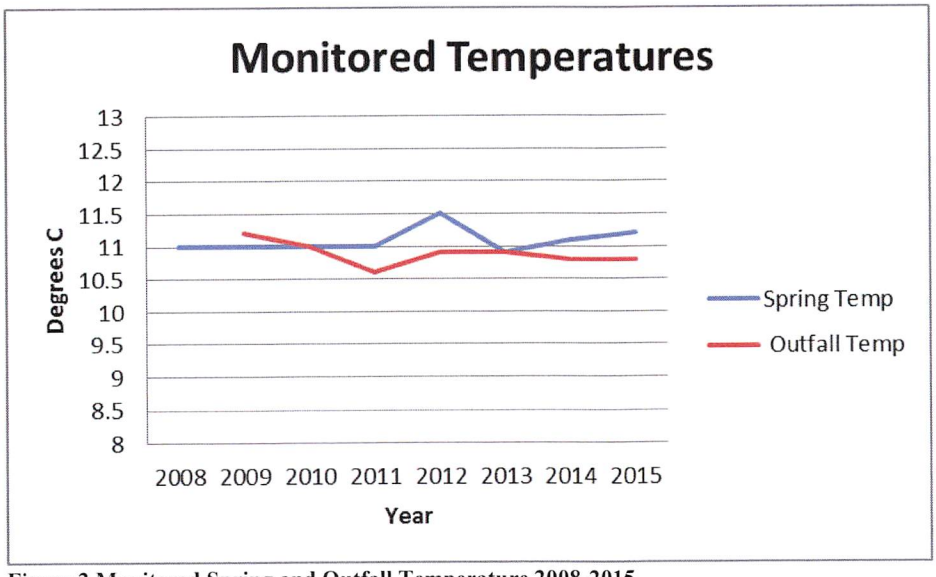


Figure 2 Monitored Spring and Outfall Temperature 2008-2015

Mitigating Temperature Factors

The IDFG facility does not appreciably impact Warm Springs Creek temperatures and the facility should not have a WLA assigned for temperature which is unattainable. Four factors suggest the hatchery is currently implementing the most practicable best management practices (BMPs), presented below.

Retention Time

Water used by the hatchery does not have an extended period of time for heat addition when used by the hatchery. During full production, the large raceways have a retention time of 58 minutes, the small raceways keep water 22 minutes, and the hole raceways average 35 minutes. From September through March (seven months per year), the retention times are typically only half as long, due to the lower production levels.

Shade

During the summer months, IDFG covers the raceways with shade cloth, mounted on a frame. While designed to reduce sun burn on juvenile fish, heat stress is also reduced. The shade cloth also reduces solar insolation. Approximately 75% of the active "hole" and "small" raceways are covered during the summer months, and 10% of the "large" raceway is covered.

Spring Sources

The spring sources are covered in course, durable rock over the entire wetland area where the springs once emerged (see Figure 7). Constructed in 1984, the original intention of the rock cover is to protect the springs from contamination, they also provide substantial temperature buffering in the high temperature months in the summer. See the figure below for detail on the rock cover.

Temperatures
Inflow and outflow temperatures vary little from each other.

Lost River Hatchery (Permit # IDG-130000)
The Lost River Hatchery is located on the northern headwaters portion of Warm Springs Creek.. Similar to the IDFG facility, the Lost River Hatchery collects water directly as it is expressed from the spring source and immediately can use the water in aquaculture activities. Currently, the facility is not in use. Purchased by Clear Springs Foods, Inc. (Clear Springs), the hatchery is undergoing significant upgrades and construction. All the old holding tanks and raceways were removed and new construction is planned for 2015.

Clear Springs collected temperature information in 2012 and 2013. Figure 3 and Figure 4 displays 2012 data reflecting the old configuration of point of diversion and delivery to the old the hatchery under previous ownership. All spring temperatures are below 9°C. In 2013, Clear Springs added additional spring sites, identified as S1 and S2 where they emerge. Each site is protected by roof shingled spring box. Site P1 is a pool created by old works, since removed. Site H1represents the location where Spring 1 may enter the new hatchery. Even without any exposure to the sun from raceways, it appears the spring near the point of use may exceed 9°C, creating for Lost River Hatchery the same problem which currently created compliance issues for the IDFG facility.

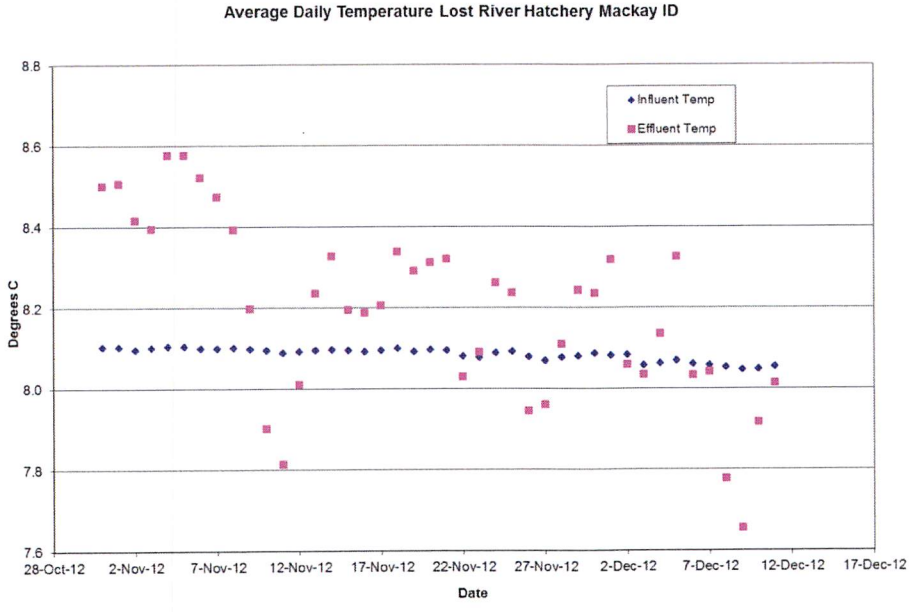


Figure 3 Lost River Hatchery Average Spring and Effluent Temperatures

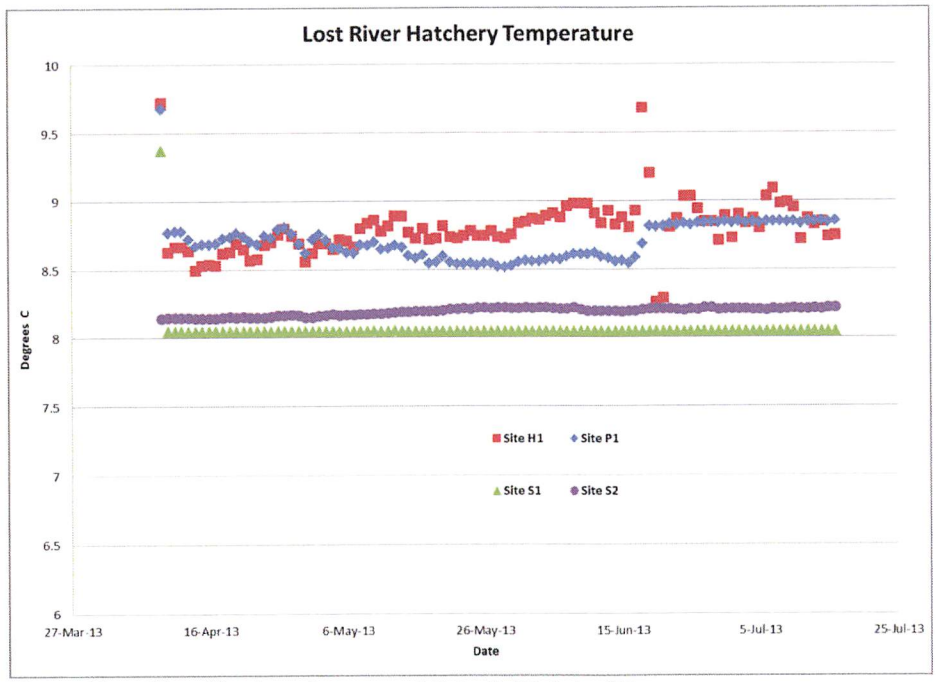


Figure 4 Lost River Hatchery Sources and Potential Points of Use

Continued Monitoring

DEQ will establish a period of temperature records in Warm Springs Creek below each facility and at a combined downstream location in order to assess the Warm Springs Assessment Unit's (AU) beneficial use support status for salmonid spawning related to temperature. Figure 5 displays approximate temperature monitoring locations.

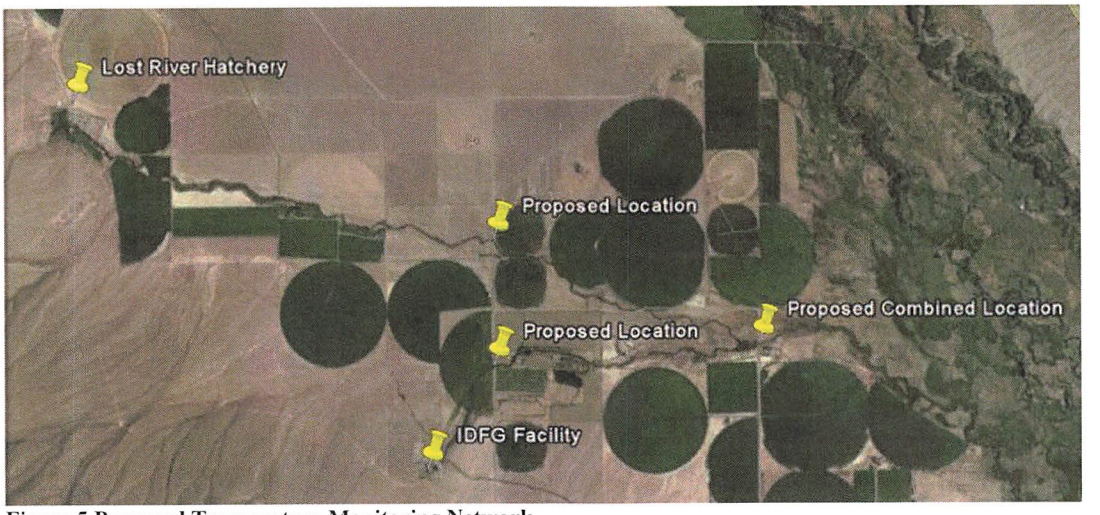


Figure 5 Proposed Temperature Monitoring Network

Modified Waste Load Allocation

Based on the collected data, the hatcheries do not raise the temperature of the spring sources before they are discharged from the present day outfall structure. The current WLA for both hatcheries is to meet the numeric state WQS including salmonid spawning temperatures during spring and fall months. This is not possible since the source water (11°C at IDFG) already exceeds the 9°C daily average for salmonid spawning. However, in order to protect salmonid spawning to the extent practicable, DEQ will modify the current temperature WLA for the hatcheries to 13°C daily maximum temperature as outlined in IDAPA 58.01.0250.02f.ii. The WLA also reflects the actual natural background conditions for temperature and is consistent with Idaho's WQS. Upon approval of this modification the temperature WLAs in the 2004 TMDL will no longer apply and the new WLAs will become part of the next General Aquaculture Permit.

Public Participation

The modification of the WLAs for the two facilities was discussed with the Upper Snake BAG on April 1, 2015. The WLA modification will go to public comment for 30 days and upon EPA approval, incorporated into the next General Aquaculture Permit and 401 certified by DEQ as compliant with Idaho's water quality standards.

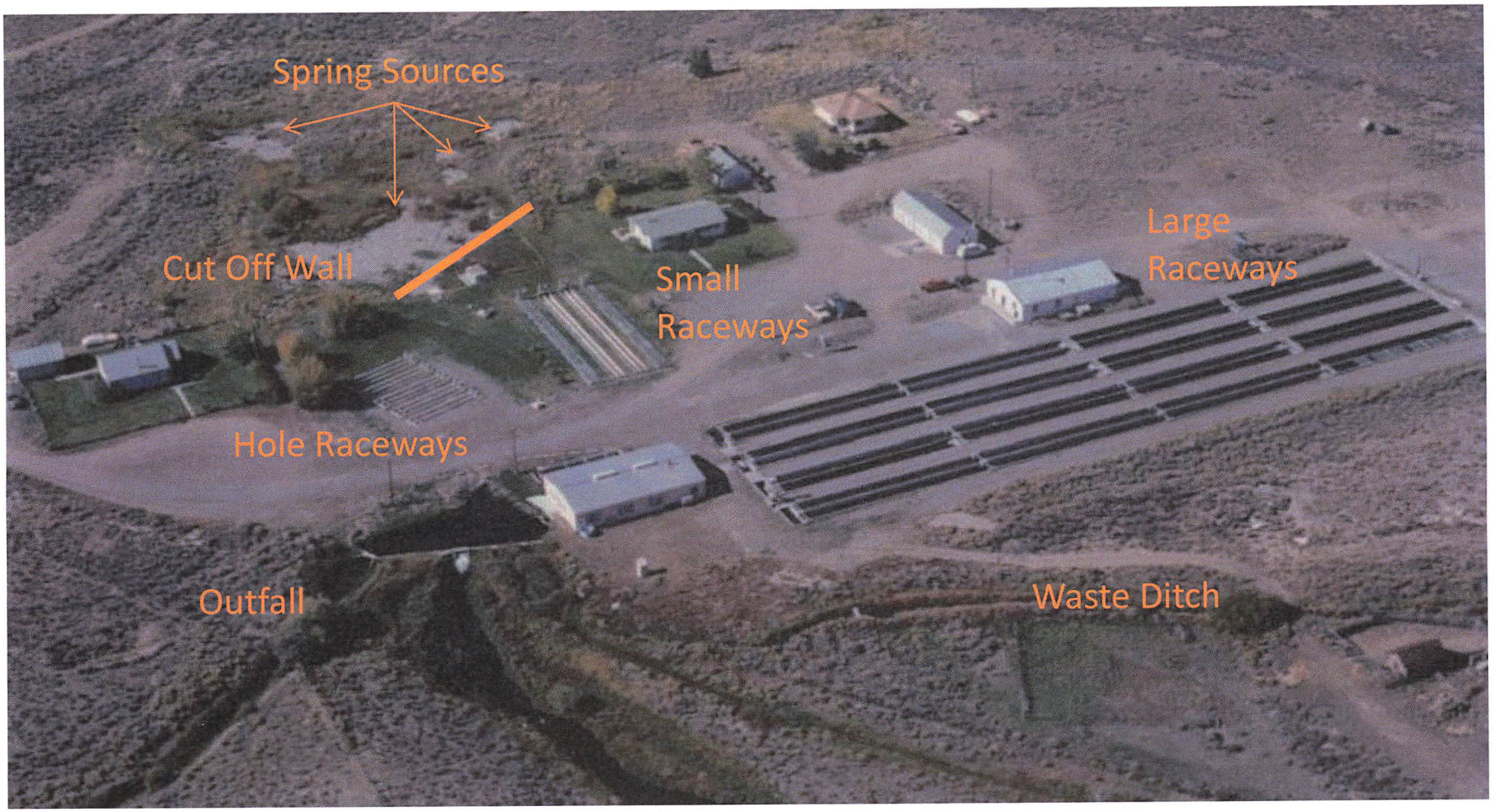
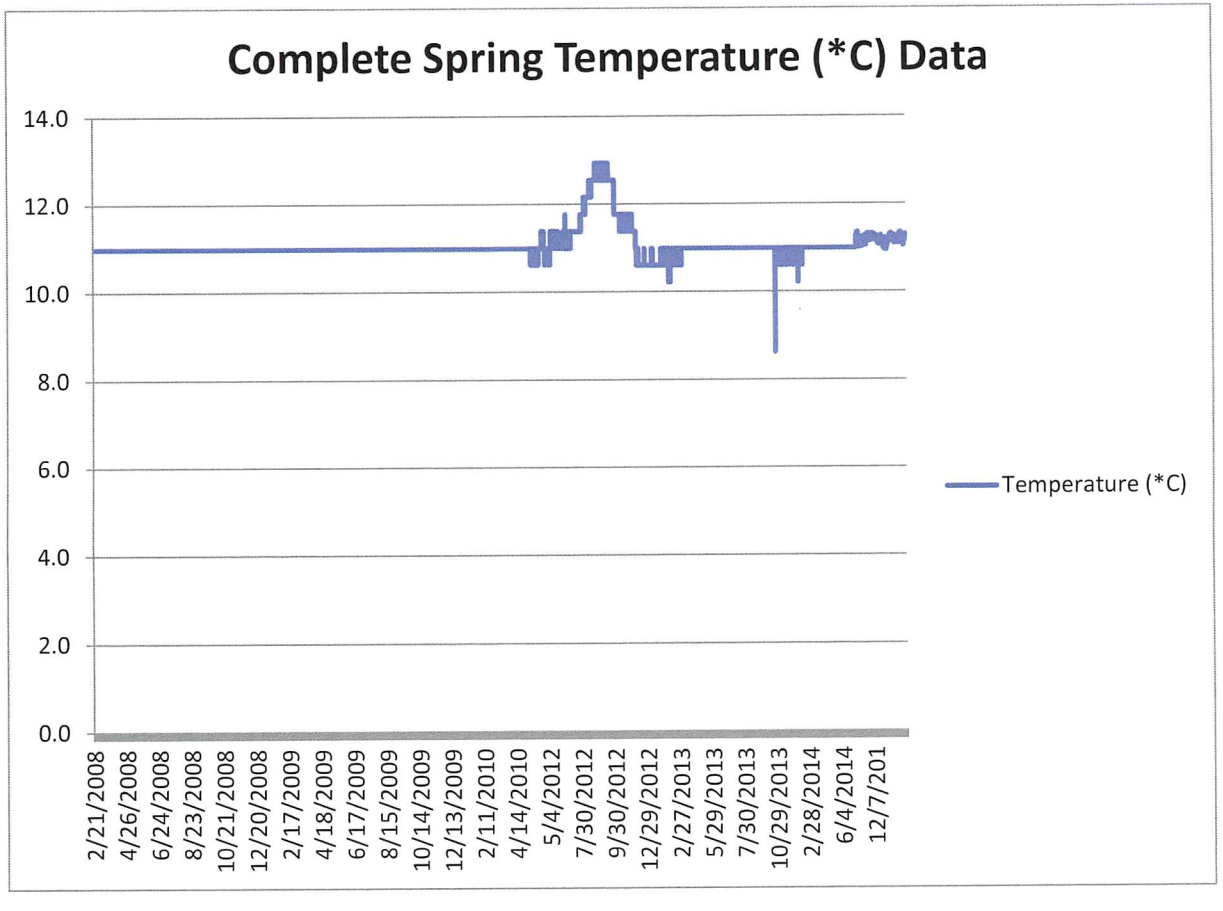


Figure 6 Aerial View of the IDFG Mackay Fish Hatchery

Figure 7 Photograph of the Covered Spring Sources Location Mackay Hatchery

Appendix

Temperature Graphs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12.0
10.0
8.0
6.0
4.0
2.0
0.0
2/21/2008
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6/24/2008
8/23/2008
10/21/2008
12/20/2008
2/17/2009
4/18/2009
6/17/2009
8/15/2009
10/14/2009
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9/30/2012
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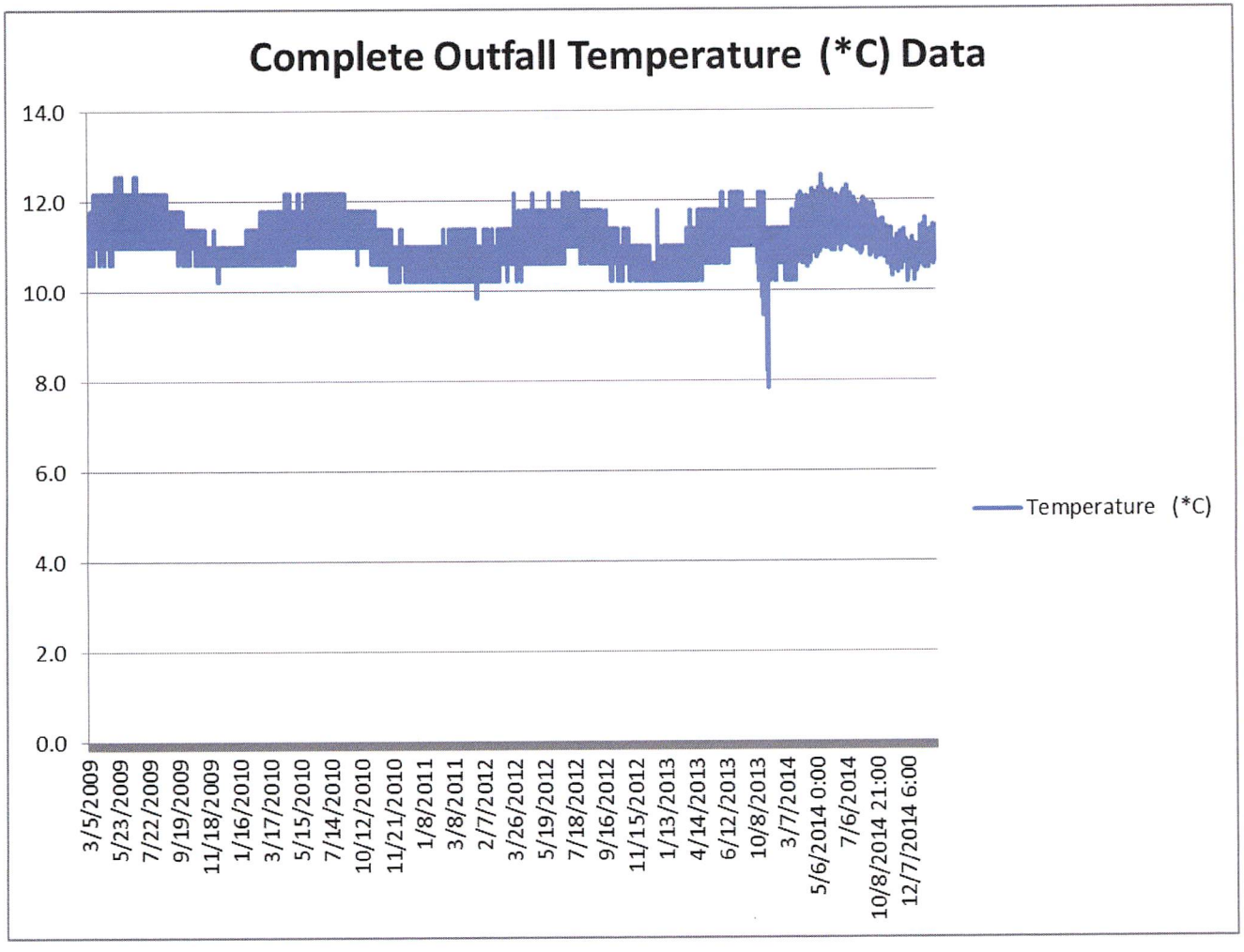
2/28/2014
6/4/2014
12/7/201
Temperature (*C)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6.0
4.0
2.0
0.0
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11/18/2009
1/16/2010
3/17/2010
5/15/2010
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10/12/2010
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Temperature (*C)